Minutes from the Mars Scout Phase A Concept Study Kickoff Meeting December 17, 2002 at NASA Headquarters

The subject meeting convened at 9:30 am Eastern in MIC 7 at NASA Headquarters on 12/17/02. Karen McBride, the Headquarters Mars Scout Program Executive opened the meeting with an overhead slide indicating the purpose of the meeting and indicated this was a closed meeting to be attended only by those who had been specifically invited. To assure that everyone was well acquainted with the many people throughout this room, Karen asked that (1) every attendee sign the attendee list being passed around and (2) to verbally introduce themselves and their affiliation with Scout. Subsequently, Karen presented the Agenda for the meeting and introduced the first speaker Mr. Orlando Figueroa, the Mars Exploration Program (MEP) Director. In turn by the Agenda, each speaker presented their prepared slides at shown on the attached Presentation materials (note that the attached slides have been updated for errors apparent at presentation).

During the briefings by the speakers, the following important decisions were announced:

- 1. Mr. Figueroa announced that although the AO indicated that funding up to \$500K would be provided for each proposal team for the conduct of the Phase A Concept Study, he was prepared to raise that figure to \$600K.
- 2. Mr. Richie presented a detailed schedule for the Phase A process which includes the date for the Phase A Concept Study Report submittal (May 15, 2003); a proposed period for the Site Visits (specifics of these will be coordinated and finalized between the PI's and Mr. Richie); and a date for the PI's to come to Headquarters to brief their science to the Code S Associate Administrator (AA), the MEP Director, the Solar System Exploration Director, and other pertinent management (July 28, 2003; details coordinated by Dr. Jim Garvin Program Scientist).

In addition to this information, the following Questions and Answers were recorded:

Q1: Is it true that any change in science scope (including an up-scope) would trigger a reconvening of the Science Peer Review Panel?

A1: The 4 Investigations were selected by the Code S AA primarily on the basis of their scientific merit. Generally, only if science change results in a significant degradation of that scientific merit would there be a need to reconvene the panel. An improvement is likely OK.

Q2: We had thought that the history had been that adding an instrument for example might trigger a reconvene. Is this true?

A2: This is a tricky issue. Adding an instrument <u>might</u> improve the science, however, it might also imperil the science instruments already selected by lessening their power, operating time, etc. Since adding an instrument would also add mass, power, cost, and complexity to the investigation, for sure it could degrade the Risk rating. In summary then, we cannot tell you without specifics, how this kind of change would be viewed.

Q3: If there is a change in the science team (Co-I list) will this trigger a major re-review of the Science?

A3: This would certainly cause us to look at this to determine the role of the changed Co-I (s) and whether or not this is viewed as a degradation or improvement. If science is not degraded this would not be a problem. As instructed in the Concept Study (CS) Guidelines (G/L's), be sure to clarify why this change is being made.

Q4: Are all the Planetary Protection requirements documented in the CS G/L's? A4: In the G/L's, plus the AO (which is still applicable), and the other referenced documents which are all included in the Scout Library.

Q5: Will the Planetary Protection (PP) agreements we had for the Phase 1 proposals still apply?

A5: The Phase 1 PP Categorization agreement provided by the PP Officer were <u>Preliminary</u>. It will be necessary for you to now finalize this based upon your specific implementation approach and details. You will need to work these details with John Rummel the PP Officer and obtain a Letter of Endorsement (LOE) from him for submittal with your CS Report (CSR).

Q6: Will there be one Point of Contact (POC) for the MEP LOE?

A6: Yes, Steve Matousek is that POC.

Q7: Does the critical event information described in Steve Matousek's presentation represent restrictions more stringent than those already published?

A7: No, that was not the intent.

Q8: Will getting our Phase A funding be held up by the NASA budget approval process?

A8: No, those funds are already available.

Q9: Should details of the incorporation of Electra also be coordinated as a part of the MEP LOE?

A9: Definitely.

Q10: Since JPL is managing all of the 4 missions selected, why is the Scout office at JPL firewalled?

A10: Not withstanding this fact, since the exchange of financial information for each specific project will be handled by the Scout office, it is necessary to assure that none of this information is shared with your competitors.

Q11: Why does the MEP LOE include a systems engineering element? Each mission project has its own systems engineering.

A11: This is true, however, within the MEP, all missions have interactions and requirements that may be synergistic and/or even orthogonal. For example, there could be multiple missions competing for communications or tracking services and in some cases this could result in either conflicts or synergy. It is desired that the project teams

develop an interaction structure that ensures compatibility with MEP. Thus, it is essential to have the MEP analyze the infrastructure requirements.

Q12: Is the EPO reviewers given the full CSR materials or just the EPO sections? A12: EPO reviewers receive and review the entire CSR (they are instructed to do so), so it is acceptable to conserve page count by placing references in the EPO area to other areas in the CSR. Note that EPO reviewers are comprised of scientists as well as other professionals in the EPO community.

Q13: Could you say more about the statement that for Downselect, all science is equal? A13: While the science of each of the 4 projects selected are very different and not equal in that sense, each has now been selected as Category I Science. Unless that changes as a result of changes made during the Phase A Concept Study, all 4 science selections are equally the same....Category I.

Q14: Can you clarify the statement on the page with regards to Evaluation Criteria that says "...cost is a Selection Factor"?

A14: The AO gives the selecting official the latitude to use the Cost to the Enterprise as an additional factor in making his selection. All other things being equal, the selecting official could select on the basis of the proposed cost.

Q15: Long lead procurement and other early activities may be activities that can reduce the risk of a project. Can you provide any guideline on the acceptable level of funding allowed for Phase B before Confirmation and the start of Phase C?

A15: Richie slide number 7 indicates that 10-15% of Phase C/D excluding Government Furnished Elements (e.g. ELV). It is up to the proposer to provide a convincing argument of what should be procured (or conducted) early to reduce risk and substantiate the need for early expenditures. As long as this is done adequately, and the funding profile is not exceeded this is likely acceptable. Note, however, that in general substantial amounts of spacecraft flight hardware building/testing or procurement of complete instruments are generally not viewed as long lead activities.

Q16: Appendix 16 of the G/L's requests cost data in an EXCEL file. Should this be included on the required CD-ROMs and 40 copies?

A16: A single copy of this information is all that is needed, however, you may include it with the other material if you wish. This single copy should be on a floppy, ZIP, or super disk.

Q 17: Is the Delta II for the Scout included in the recent NASA ELV procurement? If so, could the updated funding profile for this now be provided? In particular, would it be possible to defer the approximately \$4M for FY 04 which was shown in the AO to FY 05?

A17: Yes, the Scout was covered in that procurement, however, figures are not yet available to allow the funding profile update. Code S will pursue this with Code M and provide this at a later time, however, since each project's costs are mission unique, proposers should follow the G/L instructions which ask that details be worked with KSC

and a LOE obtained. It should be noted that it is not clear at this time that the \$4M can be deferred.

Q18: How was the order of missions as released in the public announcement determined? A18: It was done numerically by NASA's internal proposal number code.

Q19: Can you tell us anything about proposed generic Canadian involvement in the MEP or Scout? Is there anything that would be applicable to all 4 teams to be noted? A19: No, there is no generic involvement as such to report. Whatever Canadian involvement the proposers is specifically all that you should concern yourselves with. Letters of Commitment must be in order to assure that you mission projects are ready to proceed into Phase B if selected.

Q20: Can you say anything about the requirements for use of the West Virginia IV&V facilities?

A20: All requirements are spelled out in the G/L's and associated documents that are in the Scout Library. Proposers must read these documents to determine what software is likely affected. In any event, contact with this NASA facility through the POC noted in the G/L's should be made to determine their level of involvement. This requirement cannot be ignored.

Q21: Since a Mission of Opportunity (MOO) was not selected, can the funding profile for MOO shown in the AO be added to the Mission funding profile? A21: No.

Q22: Scouts are not supposed to overlap with other MEP elements but we are unaware of the status of Mars Smart Laboratory (MSL) and whether this is a problem. Can you advise us?

A22: If there were an overlap, you would not have been selected. You may ignore MSL.

Q23: What will be the ground rules for interfacing with MEP's EPO personnel?

A23: Steve Matousek is the single POC for all MEP. Contact him for instructions.

Q24: The Phase A schedule would seem to indicate that the compliance check takes 5 weeks. Is this correct?

A24: This is just a chart interpretation flaw. Compliance check is conducted in a very short time and does not wait for the rest of the process to begin. The entire process begins immediately upon receipt of the CSR's.